Keystone-Port Townsend Ferry Terminal Improvement Project—Purpose and Need

Purpose of the Action

The primary purpose of the Keystone-Port Townsend Ferry Terminal Improvement Project is to provide terminal facilities on the Keystone-Port Townsend ferry route that will accommodate the future use of the Issaquah 130 Class or other vessels with similar characteristics on this route. A secondary purpose of the project is to maintain or enhance existing services along the route, including such aspects as operational reliability, schedule, and improved safety.

Project History

Keystone Terminal

The Keystone-Port Townsend ferry route originated in the early 1900s. Prior to 1948, seasonal auto ferry operations took place at a facility approximately 1.5 miles east of the existing Keystone terminal. In 1948, the U.S. government constructed Keystone Harbor on the southwestern shore of Crockett Lake to ensure reliable all-weather, year-round ferry service for moving troops between the Olympic Peninsula and Whidbey Island and to increase regional mobility. That project included not only the construction of the harbor, but also a berm separating Crockett Lake from Keystone spit and a rock jetty at the mouth of the harbor.

Shortly after the harbor was constructed, Olympic Ferries, Ltd. of Port Townsend built the original ferry terminal facilities in Keystone Harbor and operated them until 1973, when it was no longer profitable. In 1974, the Washington State Legislature directed Washington State Ferries (WSF) to operate the route. In 1979, WSF built the existing terminal about 150 feet west of the Olympic Ferries site, where it remains today largely unchanged.

As traffic demands have grown since the 1960s, the vessels using Keystone Harbor have increased in size from 165 feet by 48 feet to 256 feet by 74 feet. As a result, the U.S. Army Corps of Engineers (which is responsible for maintenance dredging of the harbor) widened the original navigable channel from 150 feet to 200 feet and deepened it from –18 feet mean lower low water (MLLW) to –25 feet MLLW.

Port Townsend Terminal

The current Port Townsend ferry terminal was constructed by WSF in 1982, eight years after it assumed responsibility for the Keystone-Port Townsend ferry route. The original site, located six blocks to the northeast, started operations in the 1930s as part of the Olympic Ferries, Ltd. operation. By the early 1980s the old terminal had inadequate holding for waiting vehicles, causing traffic congestion on local streets. While the current terminal

alleviated this problem, traffic congestion still occurs around the terminal during peak periods.

Vessels

The root need for examining alternatives to the existing Keystone terminal and Port Townsend terminal is WSF's decision to replace its 76-year-old Steel Electric class vessels, the only WSF vessel class that can use the existing Keystone Harbor. As a system-wide strategic matter, WSF has decided to replace the Steel Electric vessels with larger 130-car vessels for reasons of efficiency, operational flexibility, and cost-effectiveness. Issaquah 130 Class vessels or similarly sized vessels are interchangeable throughout most of the WSF system and are the most efficient boat size for short to mid-length routes, such as the Keystone to Port Townsend route. A standardized vessel provides greater operational reliability for the system as a whole because vessels can be shifted from one route to another during periods of routine or emergency maintenance. Having a standardized, interchangeable vessel also provides significant efficiencies throughout the ferry system in terms of parts, maintenance, and training.

In 2002, WSF commissioned a feasibility study to examine the potential for relocating the Keystone Ferry Terminal to a site outside of Keystone Harbor. The study concluded that the Keystone ferry terminal could be relocated, pending a thorough environmental investigation, to accommodate larger vessels on the Keystone-Port Townsend ferry route. As part of the feasibility study, WSF held meetings with the community, public agencies, and tribes to elicit stakeholder input regarding the potential Keystone ferry terminal relocation and to identify any fatal flaw that could preclude further environmental review (no such flaws were found).

Need for the Action

Accommodate Replacement Vessels—The primary need for the action is that the 76-year-old Steel Electric class vessels currently serving the Keystone-Port Townsend route will be retired from service over the next ten years as part of WSF's strategic business and capital funding plans. As a result, Keystone Harbor and the existing facilities at both Keystone and Port Townsend need to be either upgraded to accommodate the Issaquah 130 Class or other vessels with similar characteristics (increased water depth on approach to accommodate the greater draft of the larger vessels, enlarged vehicle holding areas, and improved vehicle ingress/egress), or the terminals need to be relocated and redeveloped at an alternative site where the navigational and upland holding and ingress/egress requirements of the replacement vessels can be more effectively accommodated.

Maintain or Improve Operational Reliability—Another need associated with the project is to maintain or improve operational reliability. Because of low tides, strong currents, wind and wave conditions, as well as fog, vessels have grounded in the Keystone Harbor. To limit the likelihood of a vessel grounding, WSF has adopted a policy that ferries may not enter the harbor when cross-currents at the mouth of the harbor exceed 3.5 knots or if fog limits visibility. This policy resulted in 99 scheduled cancellations in 2001, 91 scheduled cancellations in 2002 along with 6 unscheduled cancellations due to fog, and 83 scheduled cancellations in 2003 due to currents, as well as 12 unscheduled cancellations due to fog.

The scheduled cancellations alone represent approximately 2 percent of the 4,410 annual scheduled trips from Keystone and 4 times the WSF system-wide average of 0.5 percent. Cancellations disrupt regional mobility and the connectivity of the area's transportation system and increase travel time between Keystone and Port Townsend from 30 minutes to over 3 hours.

Maintain Schedule—The project also needs to maintain the current schedule in order to preserve the peak-hour route through-put (number of vehicles moved per hour). The single 130-car Issaquah Class or similar vessel that will replace the two 65-car Steel Electric class vessels (based on a current average car length of 20 feet) should preserve the existing 90-minute round-trip schedule. Any alternative sites should be able to move approximately the same number of vehicles per hour as occurs with existing conditions.

Improve Public Safety—At the present time, ferry operations at Keystone Harbor occasionally conflict with diving activities at the adjacent Keystone Conservation Area or recreational boating at the Fort Casey State Park boat launch. When those conflicts occur, public safety is at risk. In addition, ferry groundings in Keystone Harbor jeopardize ferry rider and operator safety, as well as increase the potential for vessel damage. Modifying the Keystone Harbor or relocating the ferry terminal outside of the harbor would potentially reduce or eliminate those safety risks.